

In the Claims:

Claims 1 to 16 (Canceled).

1 17. (Currently amended) An arrangement for detecting a shaft
2 break on a rotor of a first turbine (10), particularly a
3 medium pressure turbine of a gas turbine, particularly of
4 an aircraft engine, whereby a second turbine (11),
5 particularly a low pressure turbine, is positioned
6 downstream of the first turbine (10), with an (10)
7 positioned upstream, with respect to a gas flow direction,
8 from a second turbine (11) in a gas turbine machine, said
9 arrangement comprising a mechanical operator element (16)
10 positioned between the rotor of the first turbine (10) and
11 a stator of the second turbine (11) radially inwardly
12 relative to a gas flow channel, and [[with]] a sensor
13 element (21) guided in the stator of the second turbine
14 (11), in order to convert a shaft break, detected by the
15 radially inwardly positioned operator element (16), wherein
16 the mechanical operator element is linearly slidably
17 arranged between the rotor of the first turbine and the
18 sensor element, and is located adjacent to the rotor such
19 that the rotor will strike the operator element and
20 linearly slide the operator element with a linear sliding
21 motion toward the sensor element in the event of the shaft
22 break, and wherein the sensor element is arranged and
23 adapted to convert the linear sliding motion of the

24 operator element into an electrical signal and to transmit
25 [[this]] the electrical signal to a switching element
26 which is positioned radially outwardly relative to the gas
27 flow channel on a housing of the gas turbine.

1 18. (Previously presented) The arrangement of claim 17,
2 characterized in that the operator element (16) is
3 positioned between a last rotor blade ring of the first
4 turbine (10), as seen in the flow direction, and a first
5 guide vane ring of the second turbine (11), as seen in the
6 flow direction.

1 19. (Previously presented) The arrangement of claim 18,
2 characterized in that the operator element (16) is
3 positioned radially inwardly and neighboring to a rotor
4 disk (12) of the last rotor blade ring, as seen in the flow
5 direction, of the first turbine (10).

1 20. (Previously presented) The arrangement of claim 17,
2 characterized in that the operator element (16) is guided
3 in a radially inwardly located sealing structure (13) of
4 the stator of the second turbine (11) in an axial direction
5 or in the flow direction, whereby the operator element (16)
6 is fixed in the axial direction by a shearable pin (18).

1 21. (Previously presented) The arrangement of claim 17,
2 characterized in that the sensor element (21) is guided in

3 a radial direction in the stator of the second turbine
4 (11), and is withdrawable out of the stator of the second
5 turbine (11) in the radial direction.

1 22. (Previously presented) The arrangement of claim 21,
2 characterized in that the sensor element (21) is guided in
3 a first guide vane ring of the second turbine (11) as seen
4 in the flow direction.

1 23. (Previously presented) The arrangement of claim 20,
2 characterized in that the sensor element (21) cooperates,
3 at a radially inwardly positioned end, with the operator
4 element (16) in such a way that, in response to a shaft
5 break, the operator element (16) is moved onto the sensor
6 element (21) and hits the same while the pin (18) is
7 sheared off, whereby the sensor element (21) generates
8 thereof an electrical signal that represents a shaft break.

1 24. (Previously presented) The arrangement of claim 17,
2 characterized in that the sensor element (21) is
3 constructed as an impact sensor the structure of which is
4 changed by an impact of the operator element (16) onto the
5 same.

1 25. (Currently amended) A gas turbine, particularly an aircraft
2 engine, with at least two compressors, at least one
3 combustion chamber, and at least two turbines, and with an